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Appendix A

Claims 1-32 (cancelled)

33. (amended) A method for depositing a catalytic layer on a surface of a substrate, the method comprising

providing a continuous fluid streams that flows from upstream to downstream to impinge on said substrate,

introducing particulates of support material into said fluid stream and, at a first upstream region of said fluid stream, depositing catalytic material on said support material particulates to produce particulates of supported catalytic material,

in a second region of said fluid stream downstream of said first region, providing a spray comprising polymeric material so as to mix said polymeric material and said supported catalytic material, and

impinging said fluid stream on said substrate surface so as to co-deposit said supported catalytic material particulates and said polymeric material on said substrate surface.

34. (previously presented) The method of Claim 33 wherein said first region is at an elevated first temperature and said second region is at a second temperature lower than said first region.

35. (previously presented) The method of Claim 34 wherein said catalytic material is produced in said first region by thermal reaction of material that is precursor to said catalytic material.

36. (cancelled)

37. (previously presented) The method of Claim 35 wherein said thermal reaction occurs in a flame.

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38. (cancelled)

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39. (amended) The method of Claim [38] 33 wherein [said quenching means comprises] a quenching fluid is introduced into said gas stream downstream of said first region.

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40. (amended) Apparatus for co-depositing [a] catalytic material and polymeric

material on a substrate, said apparatus comprising

gas flow means for directing a stream of gas through a first upstream region, a second region downstream of said first region, and a deposition region downstream of said second region,

means for locating a substrate in said deposition region such that the stream of gas impinges on said substrate,

means for introducing particulates of support material into said fluid stream at or upstream of said first upstream region,

means at said first upstream region for depositing catalytic material on said support material particulates to produce particulates of supported catalytic material,

at said second region, means for providing a spray of [catalytic] polymeric material so as to mix said polymeric material and said supported catalytic material, and

means to impinge said fluid stream on said substrate surface so as to co-deposit

~~said supported catalytic material particulates and said polymeric material~~ on said substrate surface.

41. (previously presented) Apparatus according to Claim 40 wherein said deposition means at said first location comprises means to introduce a precursor of said catalytic material and means to heat said precursor to produce said catalytic material by thermal reaction.

42. (previously presented) Apparatus according to Claim 40 wherein said heating means is a flame.

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43. (previously presented) Apparatus according to Claim 40 including quenching means to lower the temperature from said first region to said second region.

44. (previously presented) Apparatus according to Claim 43 wherein said quenching means comprises means to introduce cooling fluid into said gas stream downstream of said first region.

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